

FLYNN

Serial No. 09/555,917

April 10, 2003

The rejection of claims 1-3 and 8-11 under 35 U.S.C. §102(b) over Aziz (U.S. Patent No. 5,325,362) is respectfully traversed. Without acquiescing in the rejection, claims 1, 2, 9 and 11 have been amended for clarity. Accordingly, the rejection will be discussed with respect to the claims as amended.

Aziz is directed to a scalable and efficient intra-domain tunneling mobile IP scheme. According to Aziz the home network includes at least one mobility support border router coupled between the home network and a backbone network. A mobile host data processing device may move between networks and continue to communicate with all other fixed and mobile data processing devices coupled to the networks. When the mobile data processing device moves out of its home network, a search is initiated to determine in which area network the mobile processing device is located. Any movement of the mobile data processing device within the new area is detected by the new area router so that any messages sent for the mobile processing device are forwarded from the source area to the new area without necessarily passing through the home area router, thereby optimizing routing.

There is no teaching or suggestion in Aziz of what occurs when the mobile processing device is not locatable or otherwise unreachable. Aziz covers a large number of situations in which the location of a destination mobile device is determined by transmitting a "Who_Has" request to identify which network is currently supporting the destination mobile device or "mobile host" (MH).

FLYNN

Serial No. **09/555,917**

April 10, 2003

However, all of the various situations described in Aziz require a reply to the "Who_Has" request. Aziz simply does not contemplate the situation where the mobile device cannot be located at all. None of the flowcharts of Aziz nor the various situations described in Aziz address this particular situation.

In complete contrast, the claimed invention is specifically directed to the situation where the reachability data indicates that the mobile node is not reachable or contactable (*e.g.*, the mobile node has been switched off, it is not currently connected to any network or is otherwise not capable of use). In the situation where the mobile node is not reachable, the claimed invention provides for diverting data intended for the unreachable target node to some other node from where it can subsequently be retrieved.

There is not even a recognition in Aziz of the situation where the mobile device is not reachable. Thus, there can be no teaching in Aziz of what happens when it is determined that the mobile device is unreachable.

It is axiomatic that in order for a reference to anticipate a claim, the reference must disclose, teach or suggest each and every feature of the claim. As set forth above, Aziz fails to disclose, teach or suggest each and every feature of the claimed invention. In particular, there is no teaching or suggestion in Aziz of what actions to take when it is determined that a mobile node is unreachable. In fact, there is not even any recognition in Aziz that this situation could even occur, much less any proposed solution for this situation. Accordingly, Aziz fails to

FLYNN

Serial No. **09/555,917**

April 10, 2003

anticipate the claimed invention. Therefore, reconsideration and withdrawal of the rejection are respectfully requested.

The rejection of claims 4-6 and 12-14 under 35 U.S.C. §103(a) over Aziz in view of Joong et al. (U.S. Patent No. 6,134,433, hereinafter "Joong") is respectfully traversed. Without acquiescing in the rejection, claims 12 and 14 have been amended for clarity. Accordingly, the rejection will be discussed with respect to the claims as amended.

It is respectfully submitted that Joong fails to overcome the fundamental deficiencies noted above with respect to Aziz. Therefore, even if, *arguendo*, the combination of Aziz and Joong were proper, the combination nevertheless fails to render the claimed invention obvious. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

The rejection of claim 7 under 35 U.S.C. §103(a) over Aziz in view of Hiyama et al. (U.S. Patent No. 4,855,995, hereinafter "Hiyama") is respectfully traversed.

It is respectfully submitted that Hiyama fails to overcome the fundamental deficiencies noted above with respect to Aziz. Therefore, even if, *arguendo*, the combination of Aziz and Hiyama were proper, the combination nevertheless fails to render the claimed invention obvious. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

FLYNN
Serial No. **09/555,917**
April 10, 2003

In view of the foregoing, it is respectfully submitted that the entire application is in condition for allowance. Favorable reconsideration of the application and prompt allowance of the claims are earnestly solicited.

Should the Examiner deem that further issues require resolution prior to allowance, the Examiner is invited to contact the undersigned attorney of record at the telephone number set forth below.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____



Updeep S. Gill

Reg. No. 37,334

USG:dbp
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100

FLYNN
Serial No. 09/555,917
April 10, 2003



MARKED-UP VERSION OF AMENDED CLAIMS

1. *(Amended)* A method of routing data directed to a mobile node [(6)] in a communications system, comprising [the steps of]:
maintaining reachability information for the mobile node; [and]
receiving data directed to the mobile node; and [characterised by]
setting a destination [(18, 19a-n)] to which the received data is to be
sent when the reachability information indicates that the mobile node is
unreachable.
2. *(Amended)* A method according to claim 1, wherein the data
destination comprises a proxy node [(18)].
9. *(Amended)* A method according to claim 8, wherein the
reachability information is maintained by a home agent router [(7)].
11. *(Amended)* A mobile communications system comprising:
a mobile node [(6)];
means for maintaining reachability information for the mobile node;
[and]
means for receiving messages directed to the mobile node; and
[characterised by]

FLYNN
Serial No. **09/555,917**
April 10, 2003

a service controller [(13)] configured to set a destination for a message directed to the mobile node when the reachability information indicates that the mobile node is unreachable.

12. *(Amended)* A method of routing data directed to a mobile host [(6)] which is away from its home network [(1)], comprising [the steps of]:

maintaining a record of locations through which the data can be routed to the mobile host, and in the event that the data cannot be routed to the mobile host through any of the locations specified in the record, then routing the data to an alternative destination [(18, 19a-n)] from which it is available for subsequent retrieval to the mobile host.

14. *(Amended)* A mobile communications system comprising:
a mobile host [(6)] movable between its home network [(1)] and a plurality of connected communications networks [(2, 3)];
a router [(7)] configured to route data intended for the mobile host to a location [(10, 11)] through which the data can be sent to the mobile host, when the mobile host is away from its home network; and
a service controller [(13)] configured to intervene so as to send the data to an alternative location [(18, 19a-n)], when the data cannot be sent to the mobile host.